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NOTICE OF ALLOWANCE AND FEE(S) DUE

27476 7590 6712422099 NOVARTIS VACCINES AND DIAGNOSTICS INC. INTELLECTUAL PROPERTY- X100B

INTELLECTUAL PROPERTY- X100B P.O. BOX 8097

Emeryville, CA 94662-8097

EXAMINER GRASER, JENNIFER E

ART UNIT PAPER NUMBER

1645 DATE MAILED: 07/24/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/611,398	06/30/2003	Mariagrazia Pizza	PP00338.105	1890			
TITLE OF INVENTION: IMMUNOGENIC DETOXIFIED MUTANTS OF CHOLERA TOXIN							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/26/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correct maintenance fee notifica	correspondence including ed below or directed out tions.	ng the Patent, advance of nerwise in Block 1, by (rders and notification o a) specifying a new cor	f maintenance fees respondence addres	will be s; and/o	mailed to the current or (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block, I for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
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Emeryville, CA	94662-8097						(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	OR	ATTO	ORNEY DOCKET NO.	CONFIRMATION NO.
10/611,398	06/30/2003		Mariagrazia Pizza			PP00338.105	1890
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nonprovisional	NO	\$1510	\$300	\$0		\$1810	10/26/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	7			
GRASER, J	ENNIFER E	1645	424-236100	_			
1. Change of correspond CFR 1.363).	ence address or indicatio	n of "Fee Address" (37	2. For printing on the				
	ondence address (or Cha B/122) attached.		(I) the names of up or agents OR, alterna	to 3 registered pate atively,	nt attor	neys 1	
			(2) the name of a sir registered attorney of	ngle firm (having as	a memi	bera 2	
PTO/SB/47; Rev 03-0 Number is required.	lication (or "Fee Address 32 or more recent) attach	ed. Use of a Customer	2 registered patent a listed, no name will	ttornevs or agents. I	f no nar	ne is 3	
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or	type)			
PLEASE NOTE: Un	less an assignee is ident	ified below, no assignee	data will appear on the	patent. If an assig	nee is i	dentified below, the de	ocument has been filed for
(A) NAME OF ASSI		pietion of this form is NC	(B) RESIDENCE; (CI				
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Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent):	☐ Individual ☐ 0	Corporat	tion or other private gro	oup entity 🚨 Government
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (P	lease first reapply :	any pre	viously paid issue fee	shown above)
Issue Fee			A check is enclosed				
Advance Order	No small entity discount j	permitted)	Payment by credit of	by authorized to ch	arge the	required fee(s), any de	ficiency, or credit any
			overpayment, to De	posit Account Num	ber	(enclose a	n extra copy of this form).
5. Change in Entity Sta	itus (from status indicate is SMALL ENTITY stati		D.b. Applicant is no l	onger claiming SM	MIEN	TITY status. See 37 Cl	P 1 27(a)(2)
							e assignee or other party in
interest as shown by the	records of the United Sta	ites Patent and Trademari	k Office.				
Authorized Signature				Date			
Typed or printed nam	ie.			Registration	No.		
		FR 1.311. The informati	on is required to obtain	-		olic which is to file (and	by the USPTO to process)
an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu /irginia 22313-1450. DO 813-1450.	U.S.C. 122 and 37 CFR USPTO. Time will var- rden, should be sent to the D NOT SEND FEES OR	1.14. This collection is depending upon the in- te Chief Information Off COMPLETED FORMS	dividual case. Any officer, U.S. Patent and TO THIS ADDRES	minute commen d Trader SS. SEN	s to complete, including the state of the st	by the USPTO to process) g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

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	PROPERTY- X100B	ART UNIT	PAPER NUMBER		
P.O. BOX 8097 Emeryville, CA 94662-8097			1645 DATE MAILED: 07/24/200	9	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 436 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 436 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/611.398 PIZZA ET AL. Notice of Allowability Examiner Art Unit Jennifer F. Graser 1645 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to interview 6/19/09. The allowed claim(s) is/are 1-4,10,12-15,17-19 and 23-25. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date 6/19/09. Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

/Jennifer E. Graser/ Primary Examiner, Art Unit 1645